

## Unit/Project Design Assignment

Teachers are curriculum planners! But how do you plan for instruction? This assignment will give you experience in unit planning and development.

You will develop a project/unit that spans 2 to 3 weeks (10 to 15 days) of instruction. The complete project/unit will include the following components:

- Purpose of unit
  - How will the unit engage students? How will you link to everyday examples and experiences?
- Outline or concept map of the major concepts
- Student learning goals linked to national and state curriculum standards. (Remember: you want your units to help students build integrated understandings, so your unit should focus on one or two major student learning outcomes.) Remember to state your learning goals in terms of performances.
- A lesson sequence with a description of how each lesson builds on each other and which specify the teacher and student activities for each day. (You might think of this as an elaborated calendar or as the short form lesson plan from Chiappetta and Koballa, page 38).
- Detailed lesson plans for at least 3 lessons (Note: a lesson does not necessarily equal a day).
  - One lesson needs to focus on student inquiry. Your inquiry should focus on some of the inquiry features (asking and refining questions, finding information, designing and planning experiments, collecting and analyzing data, drawing conclusions, writing evidence based explanations and reporting findings).
  - If possible, I encourage you to use some learning or productivity technology in your design. (Note: the tool use and inquiry lesson could be blended together).
- Assessment program. How will you assess student understandings of the learning goals? You must include a complete assessment program, including formative assessments, which include embedded assessments, as well as more summative assessments.
- A rationale that provides a justification for the structure of the unit. Your rationale should focus on the following questions: How did you make the topic meaningful for students? How did you make use of inquiry? What are the ways in which you assessed student learning? How did you take account of students' prior experiences and knowledge? How will you sequence lessons so that they support the understanding of the learning outcomes? How will you help students make sense of the materials? Please make use of class readings and discussions in writing your rationale.

Plan to use materials from a variety of sources including those available at your school, other textbooks and science resources. Materials in the science methods room and the World Wide Web are also good sources. These materials will be helpful in finding investigations, activities, and assessments. Remember, as teachers you plan and to find materials that you can adapt and *modify so that you can avoid creating materials from scratch*. Your only obligation is to give credit to the source of the material. Also, it is okay if you incorporate other assignments you developed in this course (i.e. previous lesson plans, assessments, etc.) into your unit design.

Because this assignment is so critical to your development as a teacher, you should try to build your unit over time on the URITeacherknowledge wikispace. I will provide comments to help shape your work.

\* Please note that the dates below are different from those on the original syllabus. We pushed back the due dates of both the first draft and the final draft by one week.

### **Overview of Project Design Due Dates**

Project/Unit Development (First Draft)

Nov. 19th

- Learning Goals
- Overview and rationale
- Outline or concept map of ideas
- Rough Sequence
- Concept Map/Outline

Conference days

Nov 19<sup>th</sup> and 20<sup>th</sup>  
Nov 26<sup>th</sup> and 27<sup>th</sup>

Project/Unit Development (Final Draft)

December 3<sup>rd</sup>